REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Claims 1-4, 6-15, 17, 18, 20-22, 26, 27 and 30-35 are pending in this application. Non-elected claims 1-4 and 6-12 were withdrawn from consideration.

Claims 13-15 have been amended to recite "high molecular weight linear α-1,4-glucan" and "low molecular weight linear α-1,4-glucan", as proposed by the Examiner. Support for these amendments can be found on page 14, paragraphs [0050] and [0051], page 35, Production Examples 1-5 in paragraphs [0114] and [0115], and page 13, paragraph [0045] of the specification, as acknowledged by the Examiner on page 10 of the Office Action.

Claims 14 and 15 have also been amended to recite "consisting essentially of", as proposed by the Examiner.

In addition, claims 17, 26, 27 and 30-35 have been amended to correspond with claims 14 and 15.

Claims 20-22 have also been amended to recite "wherein the weight ratio", as proposed by the Examiner, and to correspond with the amendments to claim 13.

Withdrawn claim 6 has been amended to delete "and/or its modification", in order to be consistent with the remaining withdrawn claims and pending claims.

I. Claim Rejection Under 35 U.S.C. § 112

The Examiner rejects claims 20-22 under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner indicates that "a" weight ratio should be changed to "the" weight ratio. This rejection has been rendered moot in view of the above-discussed claim amendments. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

II. Claim Rejection Under 35 U.S.C. § 103

The Examiner rejects claims 13-15, 17, 18, 20-22, 26, 27 and 30-35 under U.S.C. §103(a) as being unpatentable over Hausmanns (WO 02/102355) in view of Bengs et al. (WO 01/85836; US 6,908,885), as evidence by IUPAC Gold Book. As applied to the amended claims, Applicants respectfully traverse the rejection.

As discussed above, claims 13-15 have been amended to recite "high molecular weight linear α-1,4-glucan" and "low molecular weight linear α-1,4-glucan", and claims 14 and 15 have been amended to recite "consisting essentially of".

As indicated on page 9, lines 19-21 of the Office Action, the rejection of claim 13 should be withdrawn in view of the amendments to recite "linear" α-1,4-glucan. Therefore, the rejection of claim 13 should be withdrawn.

The present invention provides a molded article from linear α-1,4-glucan. A high molecular weight linear α-1,4-glucan is combined with a low molecular weight linear α-1,4-glucan to make it possible to easily form a gelled article. The molded article of the present invention also has excellent biodegradability. The cited references do not teach or suggest a combination of high molecular weight linear α-1,4-glucan and low molecular weight linear α-1,4-glucan.

As discussed in the previous response, Hausmanns discloses a molded article from poly(1,4-α-D-glucan) and **starch** (see Abstract). The poly(1,4-α-D-glucan) has a degree of polymerization between 40 to 300, which corresponds to the low molecular weight linear α-1,4-glucan of the present invention. Hausmanns suggests that the poly(1,4-D-glucan) is combined with starch, but does not teach or suggset that the poly(1,4-α-D-glucan) is combined with high molecular weight linear α-1,4-glucan.

The reference discloses producing a molded article wherein the poly(1,4-α-D-glucan) is combined with Amyloplast PE 004 potato starch (see Example 1 of Hausmanns). The Amyloplast potato starch (20 % unbranched amylase) has a degree of polymerization of 4,000. The Examiner considers that the potato starch corresponds to the high molecular weight α-1,4-glucan of the present invention.

However, the potato starch of Hausmanns is clearly different from the high molecular weight linear α-1,4-glucan of the present invention. The linear α-1,4-glucan of the present invention is defined in paragraph [0045] of the present specification as at least two saccharide units linked by an α-1,4-glucoside bond and straight chain glucan. **The potato starch of Hausmanns contains about 80 % amylopectin** (see page 18, Example 1 of Hausmanns). Amylopectin is a macromolecule material of α-glucose, which is bonded with an α-1,4 bond and α-1,6 bond, and thus is a **branched** molecule. The potato starch of Hausmanns is therefore not the same as, nor does it suggest, the high molecular weight linear α-1,4-glucan of the present invention.

Bengs et al. disclose a gel which comprises poly-α-1,4-D-glucan and starch (see abstract). Starch, as mentioned above, is clearly different from the linear α-1,4-glucan of the present invention, which does not have any branched structure. Starch should have a branched structure.

Furthermore, claims 14 and 15 has been amended to recite the transitional phrase "**consisting essentially of**". Thus, the molded article in claims 14 and 15 exclude the incorporation of branched polysaccharides, such as amylopectin. As a result, the potato starch of Hausmanns is further distinguished from the high molecular weight linear α-1,4-glucan of the present invention.

Therefore, claim 13-15 would not have been obvious over the references.

Claims 17, 18, 20-22, 26, 27 and 30-35 depend directly or indirectly from claim13-15, and thus also would not have been obvious over the references.

Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

III. Conclusion

For these reasons, Applicants take the position that the presently claimed invention is clearly patentable over the applied references.

Therefore, in view of the foregoing amendments and remarks, it is submitted that the rejections set forth by the Examiner have been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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